REMARKS/ARGUMENTS

Amendments were made to the specification to correct errors and to clarify the specification. No new matter has been added by any of the amendments to the specification.

Claims 1-20 are pending in the present application. Claims 1-20 are amended. Support for the claim amendments can be found in the originally filed claims, and on page 44 of the Specification. Furthermore, the claims have been amended to address issues unrelated to the prior art. Reconsideration of the claims is respectfully requested.

I. Objection to Specification.

The examiner states:

> Page 9, line 27, the examiner suggest inserting "109" after "a pointing device" for clarification, because 109 was mentioned in the drawing and not mentioned in the specification.
>
> Appropriate correction required.

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The Applicants point the Examiner to page 13, l. 14 of the Specification for disclosure of reference number 109. Withdrawal of the present objection is respectfully requested.

II. Objection to Claims: Claims 1-9, 12, 14 and 16-20

The examiner stated that claims 1-9, 12, 14, 16-20 were objected to for antecedent errors. In response, the claims have been amended to overcome this objection.

III. 35 U.S.C. § 101: Claims 1 and 10-15

The examiner rejected claims 1 and 10-15 under 35 U.S.C. § 101 as being directed towards non-statutory subject matter. Applicants have amended claim 1 and 10 accordingly, thereby overcoming the rejection.

IV. 35 U.S.C. § 102, Asserted Anticipation: Claims 1-4 and 6-20

The examiner rejected claims 1-4 and 6-20 under 35 U.S.C. § 102 as anticipated by *Ito et al.*, Character Input Apparatus/Method and Computer-Readable Storage Medium, U.S. Patent No. 6,694,056 (February 17, 2004) (hereinafter "*Ito*"). This rejection is respectfully traversed.

IV.1. **Claims 1-4 and 6-9**

Claim 1 is representative of this group of claims. With regard to claim 1, the examiner states:

> (1) Regarding claim 1:
>
> Ito et al. disclose a method of handwriting recognition comprising:
>
> storing a respective reference parameter set of a plurality of reference character strokes of a reference character in a reference character dictionary (column 1, line 67) and (column 2, line 1 -4), wherein each of the respective reference parameter sets of each of the plurality of reference character strokes have an associated references sequence number; (column 2, line 3-9, (the examiner interpreted stroke orders as a stroke sequence number)
>
> receiving a stroke parameter set derived from user input of a handwriting stroke, wherein the handwriting stroke is one of a plurality of strokes requires for. writing character; (column 2, line 6-9), (the examiner interpreted the coordinate string as the stroke parameter set which is sets of coordinate of points forming the stroke)
>
> identifying a stroke sequence number of the stroke parameter set; (column 23, line 33- I 34), (the examiner interpreted that the stroke numbers are used to identify the stroke parameter sets)
>
> responsive to identification of the stroke sequence number, comparing the stroke parameter set with a reference parameter set having an associated reference sequence number equal to the stroke sequence number (column 23, line 53-61), wherein the comparison excludes at least one of the reference parameter sets. (Column 24, line 4-9, (The examiner interpreted that during the comparison of the strokes, the stroke parameter set may be ignored for certain evaluation value (for example: value 10 in figure 52), as results at least one of the reference parameter sets will be exclude during the comparison)

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A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994). Anticipation focuses on whether a claim reads on the product or process a prior art reference discloses, not on what the reference broadly teaches. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 U.S.P.Q. 781 (Fed. Cir. 1983). In this case each and every feature of the presently claimed invention is not identically shown in the cited reference, arranged as they are in the claims.

Claim 1 is representative. Claim 1 as amended is as follows:

> 1. (Currently Amended) A method for performing handwriting recognition for handwritten characters of a language having character stroke order rules, the method comprising the computer implemented steps of:
>
> storing a plurality of respective reference parameter sets in a reference character dictionary, wherein each of the plurality of respective reference parameter sets corresponds to a reference character stroke of a reference character, wherein each of the plurality of respective reference parameter sets has an associated reference sequence number;

receiving a stroke parameter set derived from user input of a handwritten stroke, wherein the handwritten stroke is one of a plurality of strokes required for writing a character;

identifying a stroke sequence number of the stroke parameter set; and

responsive to identifying the stroke sequence number, comparing the stroke parameter set with at least those of the plurality of respective reference parameter sets having their associated reference sequence number equal to the stroke sequence number, wherein the comparing excludes at least one of the plurality of respective reference parameter sets.

Ito does not anticipate claim 1 as amended because *Ito* does not teach either of the claimed features of, "wherein *each of the plurality of respective reference parameter sets* corresponding to the reference character strokes *has an associated reference sequence number*," or "responsive to identification of the stroke sequence number, *comparing the stroke parameter set* with at least those of the plurality of respective reference parameter sets *having their associated reference sequence number equal to the stroke sequence number*, wherein the comparison excludes at least one of the reference parameter sets" as required in claim 1. Instead, *Ito* teaches recording the order a plurality of strokes and then differentiating the characters based on the elapsed time between the different strokes.

The Examiner cites the following as disclosing "reference parameter sets corresponding to...associated reference sequence number[s]":

a character dictionary in which stroke orders for a plurality of characters are registered, each stroke order corresponding to a different character;

Ito, col. 1, ll. 3-5.

As shown above, the Examiner has interpreted stroke orders of *Ito* as a stroke sequence number as required by claim 1. Assuming for argument's sake only that *Ito*'s stroke order is the equivalent to the stroke sequence number of claim 1, the Examiner does not cite, and indeed *Ito* does not disclose, a feature that corresponding to the *reference sequence number* of claim 1. The character dictionary in the cited portion of *Ito* records *handwritten strokes* as input by a user. A stroke order is then assigned to each of the different *handwritten strokes*. By combining the stroke order in the character dictionary with time data from the interval-based character detecting unit, *Ito* makes a determination of which consecutive strokes in the character dictionary constitute a character. Nothing in *Ito* teaches a "*reference parameter sets* corresponding to...associated *reference sequence number[s],*" as claimed. Indeed, the Examiner fails to cites any such teaching in *Ito* of an equivalent feature.

Furthermore, because *Ito* does not disclose any *reference sequence number*, *Ito* can not possibly disclose "responsive to identification of the stroke sequence number, *comparing the stroke parameter set* with at least those of the plurality of respective reference parameter sets *having their associated reference*

sequence number equal to the stroke sequence number, wherein the comparison excludes at least one of the reference parameter sets" as required in claim 1. With regard to this feature, the Examiner cites the following:

> The stroke matching unit 106 then compares stroke information for each of the strokes i5000 to i5010 with each set of stroke information in the stroke dictionary 4501, finds the closely matching strokes as stroke candidates, and notifies the interval-based character detecting unit 108 of the stroke candidates. The stroke candidates are shown in FIG. 52. In FIG. 52, the five stroke candidates sc0 to sc4 for each of the strokes i5000 to i5010 are respectively expressed using stroke numbers. The numeric value in parenthesis added to each stroke number signifies the evaluation value for each stroke candidate.

Ito, col. 23, ll. 53-61.

This portion of *Ito* actually discloses that stroke information for each handwritten stroke stored in the character dictionary is compared with information in the stroke dictionary to determine the closest match. While this passage may teach a comparison of stroke information to a dictionary, nothing in this passage or elsewhere in *Ito* discloses the exclusion of certain reference sets from consideration based on a reference sequence number equaling a stroke sequence number, as claimed. Indeed *Ito* could not make such a disclosure because, no matter what nomenclature the Examiner uses, *Ito* does not teach both a reference sequence number and a stroke sequence number.

Thus, again, *Ito* does not teach all the features of claim 1. *Ito* fails to teach both "wherein each of the plurality of respective reference parameter sets corresponding to the reference character strokes has an associated reference sequence number," and "responsive to identification of the stroke sequence number, comparing the stroke parameter set with at least those of the plurality of respective reference parameter sets having their associated reference sequence number equal to the stroke sequence number, wherein the comparison excludes at least one of the reference parameter sets" Therefore, *Ito* does not anticipate claim 1.

Because claims 2-4, and 6-9 depend from claim 1, the same distinctions between *Ito* and the claimed invention in claim 1 apply to these claims. Consequently, it is respectfully urged that the rejection of claims 2-4, and 6-9 has been overcome.

IV.2. Claims 10-20

Claim 10 is representative of the group. With regard to claim 10, the examiner states:

> Regarding claim 10:
> A computer program product in a computer readable medium for performing handwriting recognition of a language having character stroke order rules comprising:

A reference character dictionary including a record defining a reference character, the record including a plurality of reference parameter sets each respectively defining attributes of a stroke of the reference character, each of the reference parameter sets associated with a reference sequence number (Column 8, lines 33-38), and

instructions for receiving a stroke parameter set derived from a handwritten character stroke (column 2, line 6-9) and for identifying the stroke sequence number (column 23, line 33-34) comparing the stroke parameter set with a reference parameter set having a reference sequence number equal to the stroke sequence number (column 24, line 9-12) and (column 2, line 12-14) and (column 10, line 25-29) and excluding a reference parameter set from the comparison that has a reference sequence not equal to the stroke sequence number (column 10, line 57-59).

Office Action dated January 31, 2007, pp. 6-7.

Claim 10 is representative. Claim 10 as amended is as follows:

10. A computer program product in a recordable-type medium for performing handwriting recognition of a language having character stroke order rules comprising:

a reference character dictionary including a first record defining a reference character, the first record including a plurality of reference parameter sets, each of the plurality of reference parameter sets respectively defining attributes of a stroke of a reference character, each of the plurality of reference parameter sets being associated with a reference sequence number; and

instructions for receiving a stroke parameter set derived from a first handwritten character stroke and for identifying a stroke sequence number in which the handwritten character stroke was input by a user, responsive to identifying the stroke sequence number, comparing the stroke parameter set with at least one of the plurality of reference parameter sets wherein the reference sequence number of the compared reference parameter set is equal to the stroke sequence number and excluding at least one of the plurality of reference parameter set from the comparison wherein the reference sequence number of the excluded reference parameter set is not equal to the stroke sequence number.

Ito does not anticipate claim 10 as amended because *Ito* does not teach either of the claimed features of "comparing the stroke parameter set with at least one of the plurality of reference parameter sets wherein the reference sequence number of the compared reference parameter set is equal to the stroke sequence number" or "excluding at least one of the plurality of reference parameter set from the comparison wherein the reference sequence number of the excluded reference parameter set is not equal to the stroke sequence number."

As explained *supra*, *Ito* does not teach both a reference sequence number and a stroke sequence number. Therefore, *Ito* can not possibly teach comparing stroke parameters with reference parameters based on a reference sequence number and a stroke sequence number being equal. Likewise, *Ito* can not teach excluding a reference parameter set based on a reference sequence number and a stroke sequence number not being equal.

Thus, again, *Ito* does not teach all the limitations of claim 10. Therefore, *Ito* does not anticipate claim 10.

Because claims 11-15 depend from claim 10, the same distinctions between *Ito* and the claimed invention in claim 10 apply to these claims. Consequently, the rejection of claims 11-15 has been overcome.

Claim 16 claims features similar to those found in Claim 10. *Ito* does not anticipate claim 16 as amended because *Ito* does not teach either of the claimed features of "comparing the stroke parameter set with at least one of the plurality of reference parameter sets wherein the reference sequence number of the at least one reference parameter set is equal to the stroke sequence number" or "the comparison excluding at least one of the plurality of reference parameter sets wherein the reference sequence number is not equal to the stroke sequence number." Therefore, *Ito* does not anticipate claim 16.

Because claims 17-20 depend from claim 16, the same distinctions between *Ito* and the claimed invention in claim 16 apply to these claims. Consequently, it is respectfully urged that the rejection of claims 17-20 have been overcome.

V. 35 U.S.C. § 103, Asserted Obviousness: Claim 5

The examiner rejected claim 5 under 35 U.S.C. § 103 as obvious over *Ito* in view of *Reintjes et al.*, Apparatus and Method for Automatic Form Recognition and Pagination, U.S. Patent Publication No. 2002/0067854 A1 (June 6, 2002) (hereinafter "*Reintjes*"). This rejection is respectfully traversed.

The examiner states:

> Ito et al. disclose a method for performing handwriting writing recognition as above.
>
> However, Ito et al. does not disclose the receiving of an indication that the user has knowledge of the stroke order rules as recited in claim 5.
>
> However, Reintjes teaches a method for automatic form recognition where the user has knowledge of the stroke order rules (paragraph [0010], line 8-11).
>
> One skilled in the art would have clearly recognized that the system receives an indication that the user has knowledge of the stroke order rules (paragraph [0033], line 10, paragraph [0034], [0035], [0036], [0037], [0038], [0039], [0040], [0041], [0042]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the system of Reintjes where the user has the knowledge of the stroke order rules in the handwriting recognition system of Ito et al. because such in feature the usage of electronic pen allows the data entered by the user to be captured without requiring any additional effort from the user (paragraph [0010], line 27-28), so the system automatically identifies the area of the form on which data is written by analyzing the sequence and location of the row pen stroke data to determine which field on each page was the intended field for the stroke data (paragraph [0010], line 13-16).

Office Action dated January 31, 2007, pp. 11-12.

If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985). A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994).

Claim 5 as amended is as follows:

> 5. The method according to claim 1, further including:
> receiving an indication that a user has knowledge of the character stroke order rules.

Claim 5 is dependent from claim 1. As explained above, *Ito* does not disclose each feature of amended claim 1. *Reintjes* teaches a system where a form is chosen from a plurality of stored forms based on the location of the pen strokes on a pad. *Reintjes* does not teach comparing stroke parameters with reference parameters based on a reference sequence number and a stroke sequence number being equal. Likewise, *Reintjes* does not teach excluding a reference parameter set based on a reference sequence number and a stroke sequence number not being equal. *Reintjes* does not overcome the above explained deficiencies of *Ito*. Without commenting further on the additional features of claim 5, by virtue of its dependency from claim 1, the combined references do not teach each feature of claim 5. Therefore, the rejection of claims 5 under 35 U.S.C. § 103 has been overcome.

VI. Conclusion

It is respectfully urged that the subject application is patentable over the cited references and is now in condition for allowance.

The examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,

/Brandon Williams /

Brandon Williams
Reg. No. 48,844
Yee & Associates, P.C.
P.O. Box 802333
Dallas, TX 75380
(972) 385-8777
Attorney for Applicants